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COQ6 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11456a

Product Information

Application	WB, E
Primary Accession	Q9Y2Z9
Other Accession	NP_872282.1, NP_872286.1
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB19000
Calculated MW	50870
Antigen Region	54-83

Additional Information

Gene ID	51004
Other Names	Ubiquinone biosynthesis monooxygenase COQ6, 11413-, Coenzyme Q10 monooxygenase 6, COQ6
Target/Specificity	This COQ6 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 54-83 amino acids from the N-terminal region of human COQ6.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	COQ6 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	COQ6 {ECO:0000255|HAMAP-Rule:MF_03193}
Function	FAD-dependent monooxygenase required for two non-consecutive steps during ubiquinone biosynthesis (PubMed:26260787, PubMed:38425362).

Required for the C5-ring hydroxylation during ubiquinone biosynthesis by catalyzing the hydroxylation of 4-hydroxy-3- (all-trans-decaprenyl)benzoic acid to 3,4-dihydroxy-5-(all-trans- decaprenyl)benzoic acid (PubMed:26260787, PubMed:38425362). Also acts downstream of COQ4, for the C1-hydroxylation during ubiquinone biosynthesis by catalyzing the hydroxylation of 2-methoxy-6-(all-trans- decaprenyl)phenol to 2-methoxy-6-(all-trans-decaprenyl)benzene-1,4-diol (PubMed:38425362). The electrons required for the hydroxylation reaction are funneled indirectly to COQ6 from NADPH via a ferredoxin/ferredoxin reductase system composed of FDX2 and FDXR (PubMed:26260787, PubMed:38425362).

Cellular Location

Mitochondrion inner membrane {ECO:0000255|HAMAP- Rule:MF_03193, ECO:0000269|PubMed:27499296}; Peripheral membrane protein {ECO:0000255|HAMAP-Rule:MF_03193}; Matrix side {ECO:0000255|HAMAP-Rule:MF_03193}. Golgi apparatus {ECO:0000255|HAMAP- Rule:MF_03193}. Cell projection {ECO:0000255|HAMAP-Rule:MF_03193} Note=Localizes to cell processes and Golgi apparatus in podocytes {ECO:0000255|HAMAP-Rule:MF_03193}

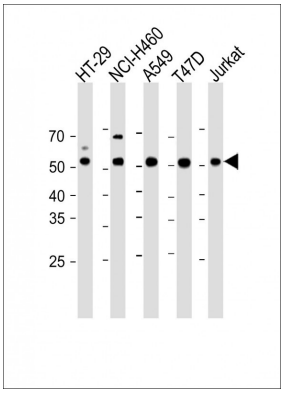
Tissue Location

Widely expressed..

References

Simpson, J.C., et al. EMBO Rep. 1(3):287-292(2000)

Images



All lanes: Anti-COQ6 Antibody (N-term) at 1:2000 dilution Lane 1: HT-29 whole cell lysate Lane 2: NCI-H460 whole cell lysate Lane 3: A549 whole cell lysate Lane 4: T47D whole cell lysate Lane 5: Jurkat whole cell lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 55 KDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.